CLAIMS

1. A compound of formula II,

Ar-C(O)-E-G-BN-L-A

II

wherein Ar is selected from the group consisting of an optionally substituted aryl ring, an optionally substituted aryl ring fused with one or more non-aromatic optionally substituted carbocylic rings, an optionally substituted aryl ring fused with one or more optionally substituted non-aromatic heterocyclic rings, an optionally substituted aryl ring fused with one or more optionally substituted aromatic or heteroaromatic rings,

C(O) is absent or a carbonyl carbon;

E is absent or selected from the group consisting of O and NH;

G is absent or selected from the group consisting of C_{1-6}-alkyl, C_{3-7}-cycloalkyl , C_{1-6}-alkyl-C_{3-7}-cycloalkyl, C_{3-7}-cycloalkyl-C_{1-6}-alkyl;

wherein BN is a basic nitrogen moiety selected from the group consisting of an amine group, an amide group, a carbamate or a carbamate derivative, urea or a urea derivative, a carbazimidamide, a nitrogen-containing heterocyclic, a nitrogen-containing heteroarylic ring, and an azabicyclic ring;

L is absent or selected from the group consisting of optionally substituted C_{1-10}-alkyl, optionally substituted C_{2-10}-alkenyl, optionally substituted C_{2-10}-alkynyl, C_{1-10}-alkylamine, C_{1-10}-alkoxy, C_{2-10}-alkenyloxy, C_{2-10}-alkynyloxy, C_{1-10}-alkoxycarbonyl, C_{2-10}-alkenyloxycarbonyl, C_{2-10}-alkynyloxycarbonyl; and

A is selected from the group consisting of $C(O)\text{-}OR^1$, $OP(O)OR^2OR^2$, $P(O)OR^2OR^2$, SO_2OR^2, SO_3H, OSO_3H, and PO_3H; wherein R^1 and R^2 are independently selected from the group consisting of H, M, C_{1-15}-alkyl, C_{3-8}-cycloalkyl, aryl, and $R^{1,2}$ wherein $R^{1,2}$ is R'-O-C(O)-R'', R'-O-C(O)-O-R'', R'-C(O)-O-R'', wherein R' and R'' are independently selected from the group consisting of C_{1-15}-alkyl, C_{3-8}-cycloalkyl and aryl.

2. The compound according to claim 1, wherein the basic nitrogen moiety is selected from the group consisting of pyridyl (pyridinyl), pyrimidinyl, thiazolyl, pyrazolyl, imidazolyl, tetrazolyl, indolyl, indolenyl, quinolinyl, isoquinolinyl, benzimidazolyl, piperidinyl, 4-piperidonyl, pyrrolidinyl, 2-pyrrolidonyl, pyrrolinyl, tetrahydroquinolinyl, tetrahydroisoquinolinyl, decahydroquinolinyl or octahydroisoquinolinyl, azocinyl, triazinyl, 6H-1,2,5-thiadiazinyl, 2H, 6H-1,5,2-dithiazinyl, phenoxathiinyl, 2H-pyrrolyl, pyrrolyl, imidazolyl, pyrazolyl, isothiazolyl, isoxazolyl, oxazolyl, pyridinyl, pyrazinyl, pyrimidinyl, pyridazinyl, indolizinyl, isoindolyl, 3H-indolyl, indolyl, 1H-indazolyl, purinyl, 4H-quinolizinyl, isoquinolinyl, quinolinyl, phthalazinyl, naphthyridinyl, quinoxalinyl, quinazolinyl, cinnolinyl, pteridinyl, 4a H-carbazole, carbazole, .beta.-carbolinyl, phenanthridinyl, acridinyl, perimidinyl, phenanthrolinyl, phenazinyl, phenarsazinyl, phenothiazinyl, furazanyl,

phenoxazinyl, pyrrolidinyl, pyrrolinyl, imidazolidinyl, imidazolinyl, pyrazolidinyl, pyrazolinyl, piperidinyl, piperazinyl, indolinyl, isoindolinyl, quinuclidinyl, morpholinyl or oxazolidinyl. Preferable heterocyclic groups include piperidino, morpholino, thiamorpholino, pyrrolidino, pyrazolino, pyrazolidino, pyrazoryl, piperazinyl, thienyl, oxazolyl, tetrazolyl, thiazolyl, imidazolyl, imidazolinyl, pyrazolyl, pyridyl, pyrimidinyl, pyrrolyl, pyrrolidinyl and quinolyl, each of which may be optional substituted.

3. The compound according to any one of the preceding claims, wherein Ar is selected from substituted benzyl, naphthalene, indoline, indole, oxazinoindoline, indolizine, isoindoline, indene, indane, indazole, azulene, benzimidazole, benzofuran, benzothiophene, benzthiazole, purine, 4H-quinolizine, quinoline, isoquinoline, cinnoline, phthalazine, quinazoline, quinoxaline, 1.3-naphthyridine, pteridine, coumaran, benzodioxane, benzopyran, chroman, isochroman, carbazole, acridine, phenazine, phenothiazine, phenoxazine, thianthrene, phenanthrene, anthracene, tetraline, fluorene, and acenaphthylene, each of which may be optionally substituted.

4. The compound according to any one of the preceding claims, wherein L absent or selected from the group consisting of straight chain or branched optionally substituted C_{1-10}-alkyl, C_{1-10}-alkylamine, C_{1-10}-alkoxy, and C_{1-10}-alkoxycarbonyl.

5. The compound according to any one of the preceding claims, wherein A is selected from the group consisting of -C(O)-OR^1, and -P(O)OR^2OR^2, wherein R^1 and R^2 are independently selected from the group consisting of H, M, C_{1-15}-alkyl, C_{3-8}-cycloalkyl, and aryl.

6. The compound according to claim to claim 2, wherein the basic nitrogen moiety is selected from the group consisting of carbazimidamide and optional substituted piperidinyl.

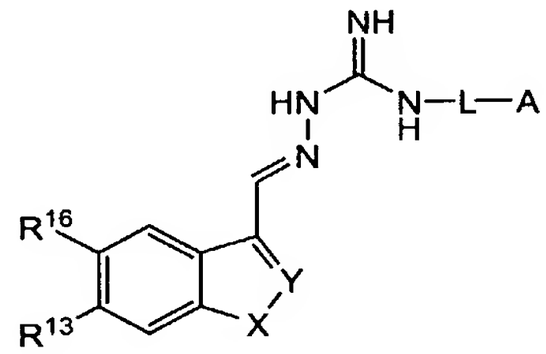
7. The compound according to claim 3, wherein Ar is selected from benzyl, naphthalene, indole, benzodioxane, indazole, and oxazinoindole.

8. The compound according to any one of the preceding claims, wherein G is absent or selected from the group consisting of C_{1-6}-alkyl, preferably absent or C_{1-3}-alkyl.

9. The compound according to any one of the preceding claims, wherein L is absent or selected from the group consisting of optionally substituted C_{1-8}-alkyl and wherein A is selected from the group consisting of -C(O)-OR^1, and -P(O)OR^2OR^2, wherein R^1 and R^2 are independently selected from the group consisting of H and C_{1-15}-alkyl.

10. The compound according to any one of the preceding claims, wherein G is absent or C_{1-3}-alkyl, the basic nitrogen moiety is selected from the group consisting of carbazimidamide and optional substituted piperidinyl and wherein L is absent or selected from the group consisting of optionally substituted C_{1-8}-alkyl.

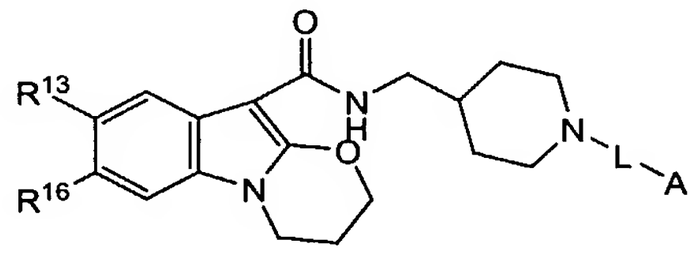
11. The compound according to claim 1 of the formula VI,



VI

wherein X and Y are independently selected from the group consisting of NH, O, C, and S;
L is absent or selected from the group consisting of straight chain or branched optionally substituted C_{1-10}-alkyl, optionally substituted C_{2-10}-alkenyl, optionally substituted C_{2-10}-alkynyl, C_{1-10}-alkylamine, C_{1-10}-alkoxy, C_{2-10}-alkenyloxy, C_{2-10}-alkynyloxy, C_{1-10}-alkoxycarbonyl, C_{2-10}-alkenyloxycarbonyl, C_{2-10}-alkynyloxycarbonyl;
A is selected from the group consisting of $-C(O)-OR^1$, $-OP(O)OR^2OR^2$, $-P(O)OR^2OR^2$, $-SO_2OR^2$, and PO_3H; wherein R^1 and R^2 are independently selected from the group consisting of H, M, C_{1-15}-alkyl, C_{3-8}-cycloalkyl, aryl, and $R^{1,2}$ wherein $R^{1,2}$ is R'-O-C(O)-R'', R'-O-C(O)-O-R'', R'-C(O)-O-R'', wherein R' and R'' are independently selected from the group consisting of C_{1-15}-alkyl, C_{3-8}-cycloalkyl and aryl;
and R^{16} and R^{13} are independently selected from the group consisting of H, OH, halogen, NH_2, O-C_{1-6}-alkyl, and C_{1-6}-alkyl.

12. The compound according to claim 1 of the formula IV-P



IV-P

wherein L is absent or selected from the group consisting of straight chain or branched optionally substituted C_{1-10}-alkyl, optionally substituted C_{2-10}-alkenyl, optionally substituted C_{2-10}-alkynyl, C_{1-10}-alkylamine, C_{1-10}-alkoxy, C_{2-10}-alkenyloxy, C_{2-10}-alkynyloxy, C_{1-10}-alkoxycarbonyl, C_{2-10}-alkenyloxycarbonyl, C_{2-10}-alkynyloxycarbonyl; and
A is selected from the group consisting of $-C(O)-OR^1$, $-OP(O)OR^2OR^2$, $-P(O)OR^2OR^2$, $-SO_2OR^2$, and PO_3H; wherein R^1 and R^2 are independently selected from the group consisting of H, M, C_{1-15}-alkyl, C_{3-8}-cycloalkyl, aryl, and $R^{1,2}$ wherein $R^{1,2}$ is R'-O-C(O)-R'',

R'-O-C(O)-O-R'', R'-C(O)-O-R'', wherein R' and R'' are independently selected from the group consisting of C_{1-15}-alkyl, C_{3-8}-cycloalkyl and aryl;
R^{13} is selected from the group consisting of H, halogen, NH_2, and C_{1-6}-alkyl; and
R^{16} is selected from the group consisting of H, halogen, OH, O-C_{1-6}-alkyl, and C_{1-6}-alkyl.

13. Use of a compound as defined in any one of the preceding claims, or a composition comprising said compound or a salt of said compound for the for the preparation of a medicament for the treatment of a cardiovascular disorder.

14. Use of a compound as defined in any one claims 1-12, or a composition comprising said compound or a salt of said compound for the preparation of a medicament for the treatment of a gastrointestinal disorder or lower urinary tract disorder.

15. The use according to claim 13, wherein the cardiovascular disorder is selected from the group consisting of tachycardia, bradycardia, cardioexcitation, cardiodepression, arrhythmia, fibrillation, atrial fibrillation, Paroxysmal Supraventricular Tachycardia (PSVT), thromoembolisms and VTE.

16. The use according to claim 14, wherein the gastrointestinal disorder is selected from the group consisting of irrital bowel syndrome; gastrointestinal hypomotility disorders; gastro-esophageal reflux, such as heartburn or mild oesophagitis; functional or nonulcer dyspensia; gastroparesis; nausea and vomiting; early satiety in the elderly; paraneoplastic of HIV-associated gastroparesis; drug-induced delays in gastric emptying and functional bowel obstructions, such as bowel obstructions caused by pancreatic cancer or drugs; and emesis.

17. A method of treating a disease associated, at least in part, with peripheral 5HT receptor comprising administering a compound as defined in any of claims 1-12.

18. A method of treating a cardiovascular disorder comprising administering a compound as defined in any one of claims 1-12.

19. A method of treating gastrointestinal disorders comprising administering a compound as defined in any one of claims 1-12.

20. A method of treating lower urinary tract disorders (detrusor) comprising administering a compound as defined in any one of claims 1-10.

21. The method according to claim 15, wherein the 5-HT receptor is of the 5-HT4 receptor subgroup.